

Abstract of the Disclosure

Newly identified mammalian taste-cell-specific G protein-coupled receptors, and the genes and cDNA encoding said receptors are described. Specifically, T1R G
5 protein-coupled receptors active in taste signaling, and the genes and cDNA encoding
the same, are described, along with methods for isolating such genes and for isolating
and expressing such receptors. Methods for representing taste perception of a
particular tastant in a mammal are also described, as are methods for generating novel
molecules or combinations of molecules that elicit a predetermined taste perception in
10 a mammal, and methods for simulating one or more tastes. Further, methods for
stimulating or blocking taste perception in a mammal are also disclosed.